

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Currently Amended) A device for determining the quality of fuel for an internal combustion engine, comprising:

 a pressure sensor for measuring the pressure in a fuel container;

 a temperature sensor for measuring the temperature in a fuel container; and
 an evaluation unit with inputs that are connected to the pressure sensor and the temperature sensor, for determining a quality value representing the fuel quality, wherein the evaluation unit determines the quality value as a function of the temperature and the pressure in the fuel container in that the evaluation unit, derives the quality value therefrom,

wherein the evaluation unit comprises a first processing unit which has inputs that are connected to the pressure sensor and the temperature sensor and which determines, as a function of the pressure and temperature in the fuel container, a gas emission characteristic value representing the gas emission behavior of the fuel, and

the evaluation unit comprises a second processing unit which has an input that is connected to the first processing unit and which determines the quality value of the fuel as a function of the gas emission characteristic value.

2. (Canceled)

3. (Currently amended) The device as claimed in claim [[2]]1, wherein the first processing unit comprises a differentiator which determines the rate of change in the pressure in the fuel container.

4. (Previously presented) The device as claimed in claim 3, wherein the first processing unit comprises a comparator unit which has inputs that are connected to the differentiator and which compares the rate of change in pressure in the fuel container with a preset threshold value.

5. (Previously presented) The device as claimed in claim 4, wherein the evaluation unit comprises a sample-and-hold device having a sampling input and a control input, the sampling input being connected to the temperature sensor, while the control input is connected to the comparator unit.

6. (Currently amended) A method for determining the quality of fuel for an internal combustion engine, comprising:

measuring pressure and/or temperature in a fuel container, while the fuel is in a fuel container; and

determining a quality value representing the fuel quality, wherein the quality value is determined as a function of the measured temperature and the measured pressure in the fuel container in that the quality value is derived therefrom;

determining a gas emission characteristic value, representing the gas emission behavior of the fuel as a function of the temperature and the pressure in the fuel container; and

determining the quality value of the fuel as a function of the gas emission characteristic value determined for the fuel.

7. (Canceled)

8. (Currently amended) The method as claimed in claim [[7]]6, further comprising:

determining the rate of change in pressure in the fuel container; and

determining the gas emission characteristic value as a function of the rate of change in pressure in the fuel container.

9. (Previously presented) The method as claimed in claim 8, further comprising:

comparison of the rate of change in pressure in the fuel container with a preset threshold value; and

determining the gas emission characteristic value as the temperature in the fuel container at which the preset threshold value for the change in pressure is reached or exceeded.

10. (Previously presented) The method as claimed in claim 6, wherein the fuel container is closed off during measurement of the pressure and the temperature.

11. (Previously presented) The method as claimed in claim 10, wherein the fuel container has tank ventilation that is shut off during measurement of the pressure in the fuel container.

12. (Previously presented) The method as claimed in claim 6, wherein the internal combustion engine is switched off during measurement of the pressure in the fuel container.

13. (Previously presented) The method as claimed in claim 6, wherein the fuel is injected into a combustion chamber of an internal combustion engine as a function of the quality value.